

From: Robinson, Valois [Robinson.Valois@epa.gov]
Sent: 6/5/2019 6:12:40 PM
To: John [jmays@powertechuranium.com]
Subject: Class III well diagrams and a couple more questions
Attachments: ClassIIIPermitFigure3-WellConstructionDiagrams.pdf

Hi John,

Does the attached diagram cover the Class III well construction options?

Is this an accurate explanation of when an open-hole completion would be used?

Powertech may not always include a well screen in each injection well. The well construction design with an open-hole completion is shown in Figure 5b of the updated Class III Draft Area Permit. Powertech would use the open-hole well completion only when the ore-bearing sand unit is competent enough to remain open and transmit lixiviant efficiently into the injection zone without the well casing and gravel pack.

I have a couple of other questions:

I have made this change in the Class III permit:

Part II.E.2. The Permittee shall follow these procedures while conducting the formation testing described in Table 6:

a. Determination of Aquifer Potentiometric Surfaces

i. Once the potentiometric surface has stabilized within each aquifer after well development, static potentiometric surface water levels shall be measured in every perimeter and non-injection interval monitoring well and a representative number of injection or production wells in every aquifer unit in the wellfield, including injection, production and monitoring wells.

"Representative number" refers to the number of injection and production wells that are constructed in the wellfield at the time the aquifer pump test is conducted. Is it correct to say:

At a minimum, a "representative number" would be the number of injection and production wells needed to have enough wells available during the wellfield pump test to serve as the pumping well in order for the test to result in drawdown in each perimeter monitoring well, thus demonstrating each perimeter monitoring well is in hydraulic connection with the wellfield injection interval.

I am thinking of saying the $\frac{1}{4}$ -mile line from the current perimeter monitoring well rings is the maximum distance the aquifer exemption boundary would extend after the delineation drilling is completed for each wellfield. Do you anticipate that the AE boundary would extend any further than $\frac{1}{4}$ -mile from the current locations of the perimeter monitoring wells rings as they are drawn on the current AE boundary map?

Thanks!

Valois

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